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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,518	12/06/2005	Yoshikazu Takashima	280760US6PCT	5266

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EXAMINER	
KING, JOHN B	

ART UNIT	PAPER NUMBER
2435	

NOTIFICATION DATE	DELIVERY MODE
06/29/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/559,518	TAKASHIMA ET AL.	
	Examiner	Art Unit	
	John B. King	2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application having Application No. 10/559518 filed on December 6, 2005 is presented for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63.**

Information Disclosure Statement

3. As required by **M.P.E.P. 609(C)**, the applicant's submissions of the Information Disclosure Statement dated 12/6/2005 is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by **M.P.E.P. 609(C)**, a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

Drawings

4. The applicant's drawings submitted are acceptable for examination purposes.

Priority

5. As required by **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority based on applications filed on May 11, 2004 (PCT/JP04/06619) and June 9, 2003 (JAPAN 2003163723).

Examiner Notes

6. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. **Claim 12** is rejected under 35 U.S.C. 101 as directed o non-statutory subject matter of software, *per se*. The claim lacks the necessary physical articles or objects to constitute a machine or manufacture within the meaning of 35 U.S.C. 101. It is clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. It is at best, function descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are non-statutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming non-functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1-2, 6, 8-9, and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Ueda et al. (US Patent 6289102 B1, published September 11, 2001) hereinafter referred to as Ueda.

As per claim 1, Ueda discloses An information recording medium storing encrypted content, having a configuration in which content and an entity code set for each entity in a manufacturing route of said information recording medium, and data included in a certain encryption processing unit is encrypted by a key generated on the basis of a seed providing encryption processing key generating information set for each said encryption processing unit and said entity code is stored in an encrypted area which is encrypted by said key generated on the basis of said seed, said encrypted area not overlapping an area to which said seed is set **(Ueda, col. 3 line 45 – col. 4 line 42, teaches a medium storing encrypted content. This encrypted content is encrypted with a second content key and stored on the medium. The second content key is encrypted by a first content key which is also stored on the medium. The encrypted content is later retrieved by decrypting the content using the second key which is decrypted by the first key. Ueda, Figure 3, also teaches the use of a seed to generate keys.)**

As per claim 2, Ueda discloses The information recording medium according to claim 1 **[See rejection to claim 1 above]**, wherein said encryption processing unit is set as a collective data area of a plurality of packets and said seed is set as data having

the predetermined number of bits from start data of a start packet of said encryption processing unit and said entity code is stored as a payload of each of said plurality of packets and stored in a data area not overlapping an area of bits constituting said seed **(Ueda, col. 3 line 45 – col. 4 line 42, teaches the data being stored on the medium in a plurality of sectors. Ueda also teaches the second key being stored as the payload of decrypting by the first key and being used to decrypt the content data. Ueda, Figure 3, teaches the seed being stored on disk in a certain area of the medium.)**

As per claim 6, Ueda discloses The information recording medium according to claim 1 **[See rejection to claim 1 above]**, wherein said information recording medium includes a first seed, which is key generating information set for each said encryption processing unit, an encrypted second seed, which is key generating information encrypted on the basis of a first block key Kb1 generated by said first seed, and encrypted content and an encrypted entity code encrypted on the basis of a second block key Kb2 generated on the basis of said second seed **(Ueda, col. 3 line 45 – col. 4 line 42, teaches the second key being encrypted by the first key and the content being encrypted by the second key. The content and the second key are stored in encrypted for whereas the first key is stored in clear text. Ueda, Figure 4, teaches seeds being used to generate keys.)**

As per claim 8, Ueda discloses A data processing method for generating data to be written to an information recording medium, comprising: an entity code setting step in which a position at which an entity code set for an entity in a manufacturing route of said information recording medium is set is controlled to set said entity code in a control information table **(Ueda, col. 3 line 45 – col. 4 line 42, teaches a second key being used to encrypt data. The second key is stored in encrypted for and encrypted by a first key.)**; a table information stored packet generating step in which a plurality of packets in which said control information table is stored in a divided manner are generated; a step in which said plurality of table information stored packets are arranged in a content stored packet sequence in a distributed manner **(Ueda, col. 3 line 45-col. 4 line 42, teaches the data being broken into sectors to be stored on the medium.)**; and a step in which data included in a certain encryption processing unit is encrypted by use of a key generated on the basis of a seed which is encryption processing key generating information set for each said encryption processing unit **(Ueda, col. 3 line 45 – col. 4 line 42, teaches a second key being used to encrypt data. The second key is stored in encrypted for and encrypted by a first key. Ueda, Figure 4, teaches using a seed to generate keys.)**; wherein said entity code setting step includes a step in which control is executed such that said entity code is included in an encrypted area encrypted by a key generated on the basis of said seed without overlapping an area to which said seed is set **(Ueda, col. 3 line 45 – col. 4 line 42, teaches a second key being used to encrypt data. The second key is stored in encrypted for and encrypted by a first key.)**

As per claim 9, Ueda discloses The data processing method according to claim 8 **[See rejection to claim 8 above]**, wherein said encryption processing unit is a collective data area of a plurality of packets, said seed is data having the predetermined number of bits from start data of a start packet of said encryption processing unit, and said entity code setting step includes a step in which said entity code is set to a data area which does not overlap an area of bits constituting said seed **(Ueda, col. 3 line 45 – col. 4 line 42, teaches the data being stored on the medium in a plurality of sectors. Ueda also teaches the second key being stored as the payload of decrypting by the first key and being used to decrypt the content data. Ueda, Figure 3, teaches the seed being stored on disk in a certain area of the medium.)**

As per claim 12, Ueda discloses A computer program for executing the processing of generating data to be written to an information recording medium, comprising: an entity code setting step in which a position at which an entity code set for an entity in a manufacturing route of said information recording medium is set is controlled to set said entity code in a control information table **(Ueda, col. 3 line 45 – col. 4 line 42, teaches a second key being used to encrypt data. The second key is stored in encrypted for and encrypted by a first key.)**; a table information stored packet generating step in which a plurality of packets in which said control information table is stored in a divided manner are generated; a step in which said plurality of table

information stored packets are arranged in a content stored packet sequence in a distributed manner **(Ueda, col. 3 line 45-col. 4 line 42, teaches the data being broken into sectors to be stored on the medium.)**; and a step in which data included in a certain encryption processing unit is encrypted by use of a key generated on the basis of a seed which is encryption processing key generating information set for each said encryption processing unit **(Ueda, col. 3 line 45 – col. 4 line 42, teaches a second key being used to encrypt data. The second key is stored in encrypted for and encrypted by a first key. Ueda, Figure 4, teaches using a seed to generate keys.)**; wherein said entity code setting step includes a step in which control is executed such that said entity code is included in an encrypted area encrypted by a key generated on the basis of said seed without overlapping an area to which said seed is set **(Ueda, col. 3 line 45 – col. 4 line 42, teaches a second key being used to encrypt data. The second key is stored in encrypted for and encrypted by a first key.)**

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. **Claims 3-5, and 10-11** as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda in view of Teunissen (US Patent 6512882 B1, filed May 7, 1999).

As per claim 3, Ueda discloses The information recording medium according to claim 1 **[See rejection to claim 1 above]**.

However, Ueda does not teach the storing of a program map table.

Teunissen discloses wherein said entity code is stored in a program map table (PMT) specified by the MPEG standard and said entity code provides data constituting a start packet of a plurality of divided packets storing said program map table (PMT) in a program information area of said program map table (PMT) **(Teunissen, col. 3 line 1, teaches the storing of a program map table on the medium.)**

Ueda and Teunissen are analogous art because they are from the same field of endeavor of storing data on a medium to be read later. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ueda by adding the teachings of Teunissen because this would have been expected in the art. Ueda, col. 1 lines 26-38, teaches the use of the MPEG standard in recording data onto a medium. The use of the PMT with the MPEG standard is well known and expected in the art.

As per claim 4, Ueda in view of Teunissen discloses The information recording medium according to claim 3 **[See rejection to claim 3 above]**, wherein said start

packet of said plurality of divided packets is a transport stream packet having a payload of 183 bytes and said entity code is stored as data within 183 bytes from start data of said program map table (PMT) in said program information area of said program map table (PMT) **(Teunissen, Figure 2, teaches the packet payload being 184 bytes. Making the packet payload be 183 bytes would have been an obvious design choice.)**

As per claim 5, Ueda discloses The information recording medium according to claim 1 **[See rejection to claim 1 above].**

However, Ueda does not teach the storing of a program map table.

Teunissen discloses wherein said entity code is stored in a program map table (PMT) specified by the MPEG standard, said program map table (PMT) is stored as a payload of each of a plurality of transport stream packets in a divided manner **(Teunissen, col. 3 line 1, teaches the storing of a program map table on the medium.)**, and each of said plurality of transport stream packet is attached with timestamp information to be stored in said information recording medium as a source packet in a distributed manner **(Teunissen, Figure 1, teaches the packets having a time code.)**

Ueda and Teunissen are analogous art because they are from the same field of endeavor of storing data on a medium to be read later. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ueda by adding the teachings of Teunissen because this would have been expected

in the art. Ueda, col. 1 lines 26-38, teaches the use of the MPEG standard in recording data onto a medium. The use of the PMT with the MPEG standard is well known and expected in the art.

As per claim 10, Ueda discloses The data processing method according to claim 8 **[See rejection to claim 8 above].**

However, Ueda does not teach a program map table.

Teunissen discloses wherein, in said entity code setting step, said entity code is set in a program information area of said program map table (PMT) specified by the MPEG standard and to a position of data constituting a start packet of a plurality of divided packets storing said program map table (PMT) **(Teunissen, col. 3 line 1, teaches the storing of a program map table on the medium.)**

Ueda and Teunissen are analogous art because they are from the same field of endeavor of storing data on a medium to be read later. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ueda by adding the teachings of Teunissen because this would have been expected in the art. Ueda, col. 1 lines 26-38, teaches the use of the MPEG standard in recording data onto a medium. The use of the PMT with the MPEG standard is well known and expected in the art.

As per claim 11, Ueda in view of Teunissen discloses The information processing method according to claim 10 **[See rejection to claim 10 above]**, wherein said start

packet of said plurality of divided packets is a transport stream packet having a payload of 183 bytes and, in said entity code setting step, said entity code is set as data said program information area of said program map table (PMT) and within 183 bytes from start data of said program map table (PMT) **(Teunissen, Figure 2, teaches the packet payload being 184 bytes. Making the packet payload be 183 bytes would have been an obvious design choice.)**

13. **Claim 7** as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda in view of Shimoda (US Patent 6381202 B1, file October 25, 2000).

As per claim 7, Ueda discloses The information recording medium according to claim 1 **[See rejection to claim 1 above]**.

However, Ueda doesn't teach the entity code being an ASC or DMC.

Shimoda discloses wherein said entity code includes an authoring studio code (ASC) and a disc manufacturer code (DMC) **(Shimoda, col. 4 lines 36-65, teaches the use of a manufacturing code.)**

Ueda and Shimoda are analogous art because they are from the same field of endeavor of recording information onto mediums for later retrieval. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ueda by adding the teachings of Shimoda because this would allow disc manufacturers to put a manufacturing code on all of their discs to prevent piracy.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. King whose telephone number is (571)270-7310. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571)272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John B King/
Examiner, Art Unit 2435
/Kimyen Vu/
Supervisory Patent Examiner, Art Unit 2435